

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

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Listing of Claims:

1. (currently amended) A cooling system for cooling a circuit board including a first heat source and a second heat source, comprising:

10 a first cold plate configured to absorb heat dissipated from the first and second heat sources; and

a first actuator configured to actuate the first cold plate into conforming thermal contact with the first and second heat sources on the circuit board, the first cold plate being compliantly mounted to the actuator.

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2. (currently amended) A cooling system for cooling a circuit board including a first heat source and a second heat source, comprising:

a cooling apparatus configured to absorb heat dissipated from the first and second heat sources; and

20 an actuator configured to actuate the cooling apparatus into conforming thermal contact with the first and second heat sources;

wherein the cooling apparatus comprises a first cooled body and a second cooled body, the first cooled body being compliantly mounted to the actuator;

25 wherein the actuator is configured to actuate the first cooled body into conforming thermal contact with the first heat source; and

wherein the actuator is further configured to actuate the second cooled body into conforming thermal contact with the second heat source.

3. (currently amended) ~~The cooling system of claim 2, wherein:~~ A cooling system for cooling a circuit board including a first heat source and a second heat source, comprising:

a cooling apparatus configured to absorb heat dissipated from the first and second heat sources; and

an actuator configured to actuate the cooling apparatus into conforming thermal contact with the first and second heat sources;

wherein the cooling apparatus comprises a first cooled body and a second cooled body;

wherein the actuator is configured to actuate the first cooled body into conforming thermal contact with the first heat source;

wherein the actuator is further configured to actuate the second cooled body into conforming thermal contact with the second heat source;

wherein the actuator comprises a support configured to retractably actuate toward and away from the circuit board; and

wherein the first and second cooled bodies are compliantly mounted to the support.

4. (currently amended) ~~The cooling system of claim 1,~~ A cooling system for cooling a circuit board including a first heat source and a second heat source, comprising:

a first cold plate configured to absorb heat dissipated from the first and second heat sources; and

a first actuator configured to actuate the first cold plate into conforming thermal contact with the first and second heat sources on the circuit board;

wherein the cold plate comprises a thermally conductive body composed of a compliant material, and wherein the cold plate adaptively conforms to the first and second heat sources to compensate for any differences in their height with respect to the circuit board.

5. (previously presented) The cooling system of claim 4, wherein the cold plate defines a non-planar surface that substantially conforms to the height of the first and second heat sources with respect to the circuit board.

6. (currently amended) A cooling system for cooling a circuit board including a first heat source, a second heat source, and a third heat source, the first heat source and the second heat source being on a first side of the circuit board, and the third heat source being on a second side of the circuit board, comprising:

5 a first cooling apparatus configured to absorb heat dissipated from the first and second heat sources;

a first actuator configured to actuate the first cooling apparatus into conforming thermal contact with the first and second heat sources, the first cooling apparatus being compliantly mounted to the first actuator;

10 a second cooling apparatus configured to absorb heat dissipated from the third heat source; and

a second actuator configured to actuate the second cooling apparatus into conforming thermal contact with the third heat source on the circuit board.

15 7. (currently amended) ~~The cooling system of claim 6, wherein~~ A cooling system for cooling a circuit board including a first heat source, a second heat source, and a third heat source, the first heat source and the second heat source being on a first side of the circuit board, and the third heat source being on a second side of the circuit board, comprising:

20 a first cooling apparatus configured to absorb heat dissipated from the first and second heat sources;

a first actuator configured to actuate the first cooling apparatus into conforming thermal contact with the first and second heat sources;

a second cooling apparatus configured to absorb heat dissipated from the third heat source; and

25 a second actuator configured to actuate the second cooling apparatus into conforming thermal contact with the third heat source on the circuit board;

wherein the first cooling apparatus comprises a first cooled body and a second cooled body;

wherein the second cooling apparatus comprises a third cooled body;

30 wherein the first actuator is configured to actuate the first cooled body into conforming thermal contact with the first heat source;

wherein the first actuator is further configured to actuate the second cooled body into conforming thermal contact with the second heat source; and

35 wherein the second actuator is configured to actuate the third cooled body into conforming thermal contact with the third heat source.

8. (original) The cooling system of claim 7, wherein:
the first actuator comprises a first support configured to retractably actuate toward
and away from the first side of the circuit board;
the first and second cooled bodies are compliantly mounted to the first support;
5 the second actuator comprises a second support configured to retractably actuate
toward and away from the second side of the circuit board; and
the third cooled body is compliantly mounted to the second support.

9. (currently amended) ~~The cooling system of claim 6;~~ A cooling system for cooling
10 a circuit board including a first heat source, a second heat source, and a third heat source,
the first heat source and the second heat source being on a first side of the circuit board,
and the third heat source being on a second side of the circuit board, comprising:

a first cooling apparatus configured to absorb heat dissipated from the first and
second heat sources;

15 a first actuator configured to actuate the first cooling apparatus into conforming
thermal contact with the first and second heat sources;

a second cooling apparatus configured to absorb heat dissipated from the third heat
source; and

20 a second actuator configured to actuate the second cooling apparatus into
conforming thermal contact with the third heat source on the circuit board;

wherein the first and second cooling apparatuses each comprise a thermally
conductive body composed of a compliant material, and wherein the first cooling
apparatus adaptively conforms to the first and second heat sources to compensate for any
differences in their height with respect to the circuit board.

25 10. (previously presented) The cooling system of claim 9, wherein the first cooling
apparatus defines a non-planar surface that substantially conforms to the height of the first
and second heat sources with respect to the circuit board.

11. (currently amended) A cooling system for cooling a circuit board including a first heat source and a second heat source, comprising:

a cold plate configured to absorb heat dissipated from the first and second heat sources; and

5 a means for actuating the cold plate into conforming thermal contact with the first and second heat sources on the circuit board, wherein the cold plate is compliantly mounted to the means for actuating.

12. (previously presented) A cooling system for cooling a circuit board including a first heat source and a second heat source, comprising:

a means for absorbing heat dissipated from the first and second heat sources; and

a means for actuating the means for absorbing into conforming thermal contact with the first and second heat sources;

15 wherein the means for absorbing comprises a first cooled body and a second cooled body;

wherein the means for actuating is configured to actuate the first cooled body into conforming thermal contact with the first heat source; and

wherein the means for actuating is further configured to actuate the second cooled body into conforming thermal contact with the second heat source.

20 13. (previously presented) The cooling system of claim 11, wherein the means for actuating is configured to retractably actuate the cold plate toward and away from the circuit board.

25 14. (currently amended) A method for cooling a circuit board including a first heat source and a second heat source, comprising:

retractably actuating an actuator compliantly carrying a cold plate such that the cold plate is moved into conforming thermal contact with the first and second heat sources on the circuit board.

15. (previously presented) A method for cooling a circuit board including a first heat source and a second heat source, comprising:

retractably actuating an actuator carrying a means for absorbing heat such that the means for absorbing heat is moved into conforming thermal contact with the first and
5 second heat sources on the circuit board;

wherein the means for absorbing comprises a first cooled body and a second cooled body; and

wherein in the step of retractably actuating, the actuator is configured to actuate the first cooled body into conforming thermal contact with the first heat source, and the
10 means for actuating is further configured to actuate the second cooled body into conforming thermal contact with the second heat source.

16. (previously presented) A cooling system for cooling a circuit board including a first heat source and a second heat source, comprising:

15 a first cold plate configured to absorb heat dissipated from the first heat source;
a second cold plate configured to absorb heat dissipated from the second heat source; and

a first actuator configured to actuate the first and second cold plates into conforming thermal contact with the first and second heat sources, respectively.

17. (previously presented) The cooling system of claim 16, wherein:

the actuator comprises a support configured to retractably actuate toward and away from the circuit board; and

the first and second cold plates are compliantly mounted to the support.

18. (previously presented) The cooling system of claim 16, and further including a third heat source, the first heat source and the second heat source being on a first side of the circuit board, and the third heat source being on a second side of the circuit board and further comprising:

30 a third cold plate configured to absorb heat dissipated from the third heat source;
and

a second actuator configured to actuate the third cold plate into conforming thermal contact with the third heat source.

19. (previously presented) The cooling system of claim 7, wherein:
the first actuator comprises a first support configured to retractably actuate toward
and away from the first side of the circuit board;
the first and second cold plates are compliantly mounted to the first support;
5 the second actuator comprises a second support configured to retractably actuate
toward and away from the second side of the circuit board; and
the third cold plate is compliantly mounted to the second support.

20. (previously presented) The method of claim 15, wherein the first cooled body and
10 the second cooled body are cold plates.

21. (new) The cooling system of claim 2, wherein the second cooled body is
compliantly mounted to the actuator.

15 22. (new) The cooling system of claim 2, wherein the first and second cooled bodies
are compliantly mounted to the actuator such that they can move in a gimbaled manner.

23. (new) A cooling system configured for cooling a circuit board including a first
heat source on a first side of the circuit board, comprising:

20 a first cold plate having a thermal-connection surface configured to absorb heat
dissipated from the first heat source; and

a first actuator configured to translate the first cold plate from a position where the
thermal-connection surface is substantially parallel to the plane of the circuit board, to a
position where it is in conforming thermal contact with the first heat source.

25 24. (new) The cooling system of claim 23, being further configured for cooling a
second heat source on a second side of the circuit board, and further comprising:

a second cold plate having a second thermal-connection surface configured to
absorb heat dissipated from the second heat source; and

30 a second actuator configured to translate the second cold plate from a position
where the second thermal-connection surface is substantially parallel to the plane of the
circuit board, to a position where it is in conforming thermal contact with the second heat
source.

25. (new) A cooling system configured for cooling a circuit board including a first heat source on a first side of the circuit board, the circuit board being configured for mounting in a powerable connector, comprising:

5 a first cold plate having a thermal-connection surface configured to absorb heat dissipated from the first heat source; and

a first actuator configured to actuate the first cold plate laterally into conforming thermal contact with the first heat source, and to de-actuate the first cold plate laterally out of conforming thermal contact with the first heat source;

10 wherein the first actuator is further configured to de-actuate the first cold plate longitudinally such that a shearing force occurs between the first cold plate and the first heat source during de-actuation.

26. (new) The cooling system of claim 25, wherein the first actuator is further configured such that the longitudinal de-actuation serves to disconnect the circuit board from the connector.

27. (new) The cooling system of claim 25, being further configured for cooling a second heat source on a second side of the circuit board, and further comprising:

20 a second cold plate having a thermal-connection surface configured to absorb heat dissipated from the second heat source; and

a second actuator configured to actuate the second cold plate laterally into conforming thermal contact with the second heat source, and to de-actuate the second cold plate laterally out of conforming thermal contact with the second heat source;

25 wherein the second actuator is further configured to de-actuate the second cold plate longitudinally such that a shearing force occurs between the second cold plate and the second heat source during de-actuation.

28. (new) The cooling system of claim 27, wherein the first and second actuators are further configured such that the longitudinal de-actuation serves to disconnect the circuit board from the connector.